

No.

200200155



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Lebanon Seaboard Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BLUEGRASS, KENTUCKY

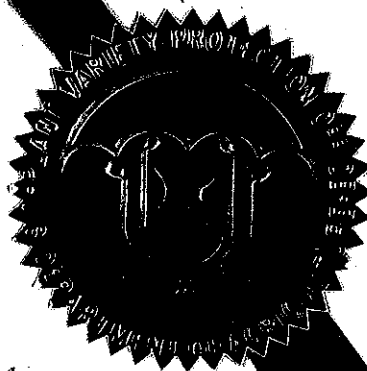
'Cabernet'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifteenth day of June, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



REPRODUCE LOCALLY. Include form number and date on all reproductions.

FORM APPROVED - OMB NO. 0581-00

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)

Lebanon Seaboard Corporation

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

H94-329 and
LTP-329

3. VARIETY NAME

Cabernet

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

P.O. Box 10
Huntsville, Utah 84317-0010

5. TELEPHONE (include area code)

503-580-7333

6. FAX (include area code)

801-745-4610

FOR OFFICIAL USE ONLY

PVPO NUMBER

200200155

DATE

May 1, 2002

7. GENUS AND SPECIES NAME

Poa pratensis L.

8. FAMILY NAME (Botanical)

Poaceae

PLANT AND EXAMINATION FEE:

\$ 2705-

DATE

3/12/2002

CERTIFICATION FEE:

\$ 432-

DATE

3/28/2005

9. CROP KIND NAME (Common name)

Kentucky bluegrass

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)

Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

Pennsylvania

12. DATE OF INCORPORATION

1949

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Tim Ford, Research Agronomist

P.O. Box 10

Huntsville, Utah 84317-0010

14. TELEPHONE (include area code)

503-580-7333

15. FAX (include area code)

801-745-4610

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- ☒ Exhibit A. Origin and Breeding History of the Variety
- ☒ Exhibit B. Statement of Distinctness
- ☒ Exhibit C. Objective Description of the Variety
- ☒ Exhibit D. Additional Description of the Variety (Optional)
- ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
- ☒ Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)
- ☒ Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)

☐ YES If "yes," answer items 18 and 19 below

☒ NO If "no," go to item 20

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ YES

☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ FOUNDATION

☐ REGISTERED

☐ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

☒ YES If "yes," give names of countries and dates

☐ NO

September 1, 2001 in the United States

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s))

Tim Ford

SIGNATURE OF APPLICANT (Owner(s))

NAME (Please print or type)

NAME (Please print or type)

Tim Ford

CAPACITY OR TITLE

CAPACITY OR TITLE

Research Agronomist

DATE

04/27/02

DATE

1

Origin and Breeding History of Cabernet (H94-329) Kentucky Bluegrass

Cabernet (H94-329) Kentucky bluegrass (*Poa pratensis* L.) originated as a single, apomictic plant selected from the open-pollinated progeny of RSP. RSP is a vigorous, apomictic plant that originated from a plant collected from an old turf area in River Side Park, in Baltimore, MD. This is a typical Mid-Atlantic ecotype collection (1) with excellent summer stress performance and susceptibility to leaf spot disease (*Drechslera poae*). RSP is similar to and may be an isoclone of the variety Wabash.

A plant of RSP was open pollinated by typical plants of Princeton P-105, Rita, and C-74 as well as plants collected from the Mid-Atlantic region, Delaware, Maryland, New Jersey and Pennsylvania. Four plants of *Poa ampla* and *P. ampla* x *P. pratensis* were also included in the open-pollinated crossing block, which consisted of a total of 153 plants, during the late winter of 1991-1992 in a greenhouse located on the Cook College campus of Rutgers University. Environmental conditions prior to and during pollination were modified to increase sexual reproduction of the facultatively apomictic Kentucky bluegrasses (2,3,4). Seed from the RSP female parent was harvested in the spring of 1992. Seedlings were grown in the greenhouse in the winter of 1992-1993 and hybrids were phenotypically identified. Selected hybrid plants were established in a spaced-plant nursery at the Rutgers University Plant Science Research and Extension Farm at Adelphia, NJ, during the spring of 1993. The following summer, an attractive F₁ hybrid plant was harvested on June 22. This was a medium maturing, average yielding plant compared to other Kentucky bluegrasses harvested from that nursery. In the fall of

1994, it was planted in a turf plot at North Brunswick, New Jersey with the designation H94-329. Cabernet is over 95% apomictic from tillers taken from the original turf plot with fair to good floret fertility and a seed head number rating of 6.5 based on a 1-9 scale (9=most seed heads). Cabernet has above average turf quality, a dark green genetic color, above average spring green up, leaf spot resistance, billbug resistance, excellent stripe smut resistance and summer stress performance. Cabernet has appeared to be very uniform and stable through successive generations in seed production trials.

References

1. Murphy, J.A., S.A. Bonos and P.Perdomo. 1997. Classification of Kentucky bluegrass genotypes. *Int. Turf. Soc. Res. J.* 8: 1176-1183.
2. Bashaw, E.C., and C.R. Funk. 1987. Apomictic grasses. p. 40-82. *In* F. Lemaire (ed.) *Proc. Int. Turfgrass Res. Conf., 5th, Avignon, France.* INRA Publ., Versailles.
3. Hintzen, J.J., and A.J.P. van Wijk. 1985. Ecotype breeding and hybridization in Kentucky bluegrass (*Poa pratensis* L.). p. 213-219. *In* F. Lemaire (ed.) *Proc. Int. Turfgrass Res. Conf., 5th, Avignon, France.* INRA Publ., Versailles.
4. Pepin, G.W., and C.R. Funk. 1971. Intraspecific hybridization as a method of breeding Kentucky bluegrass for turf. *Crop Sci.* 11:445-448.

Cabernet is over 95% apomictic and appeared to approach 98% in a spaced plant nursery. Two plants out of one hundred were considered true variants during the second year of observations in a spaced plant nursery. They were considerably smaller when compared to Cabernet, neither put up seed heads during the second year, while Cabernet had abundant panicle production. They also lacked the aggressive rhizomes apparent in Cabernet. However, they were approximately the same color as Cabernet. I have observed seed production fields of Cabernet for over four years and have never seen a variant, probably because they are around 2% or less, and are very small and weak when compared to Cabernet and get lost in the dense drilled row. It is unlikely that the variants contribute any harvestable seed in certified production fields.

STATEMENT OF DISTINCTNESS

Cabernet Kentucky bluegrass is most similar to Eagleton and RSP (Breeding Line-Wabash iso-clone) Kentucky bluegrass. Rutgers University also recognizes these types as Mid-Atlantic types. RSP is the maternal parent of Cabernet (see breeding history). Eagleton, RSP, Wabash and Cabernet generally have good spring green up and are susceptible to Leaf spot (see data).

However, Cabernet is significantly darker in genetic color than Eagleton (6.2 vs. 5.2), see NTEP data. Eagleton has significantly better seedling vigor (5.9 vs. 4.9), see NTEP data. Cabernet was 3 days later in heading date when compared to Wabash in a trial near Hubbard, Oregon (see data).

Cabernet is most similar to Wabash, which is an iso-clone of RSP, the maternal parent of Cabernet. They both have the same heading date. Cabernet is significantly shorter than Wabash. Cabernet has a significantly shorter panicle than Wabash. Cabernet has a significantly shorter tiller leaf than Wabash. Cabernet also has a significantly shorter flag leaf than Wabash.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN, & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Bluegrass)

OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS (*Poa* spp.)

NAME OF APPLICANT(S) Lebanon Seaboard Corporation	TEMPORARY DESIGNATION H94-329<P-329	VARIETY NAME Cabernet
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P.O. Box 10 Huntsville, UT 84317-0010		OFFICIAL USE ONLY PVPO NUMBER 200200155

Select the number which characterizes the variety in the features described below. For measured characteristics use leading zeros as necessary in order to fill all blanks (e.g., 09, 081). Those characteristics marked with a star * are preferred to be recorded. Any others should be recorded to help establish novelty or uniqueness. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used: . Describe location of test area, conditions, and number of plants used:

Hubbard, OR Three replications of thirty total plant measurements, minimum.

1. SPECIES:

<input type="text"/> <input type="text"/> <input type="text"/>	1 = <i>Poa compressa</i>	2 = <i>P. pratensis</i>	3 = <i>P. trivialis</i>	4 = Others (Specify) _____
<input type="text"/> <input type="text"/> <input type="text"/>	Chromosome number Unknown			

2. ADAPTATION: (0 = Not tested, 1 = Not adapted, 2 = Adapted, 3 = Well adapted)

<input type="text"/> <input type="text"/> <input type="text"/>	Northeast	<input type="text"/> <input type="text"/> <input type="text"/>	Transitional zone	<input type="text"/> <input type="text"/> <input type="text"/>	Southeast	<input type="text"/> <input type="text"/> <input type="text"/>	North Central
<input type="text"/> <input type="text"/> <input type="text"/>	Pacific N.W.	<input type="text"/> <input type="text"/> <input type="text"/>	Intermountain	<input type="text"/> <input type="text"/> <input type="text"/>	Southwest (CA., AZ.)		
<input type="text"/> <input type="text"/> <input type="text"/>	Other (Specify) _____						

3. MATURITY (At first anthesis): Give test area _____

* <input type="text"/> <input type="text"/> <input type="text"/>	1 = Very early	2 = Early (Delta, Mystic)	3 = Medium early (Fylking, Nugget)
	4 = Medium late (Newport, Adelphi, Aquila)	5 = Late (Merion, Baron, Enmundi)	
	6 = Very late (Pacific)		

May 5, 2003

Heading date April 28th Date of First Anthesis Collecting Data 2002 season

<input type="text"/> <input type="text"/> <input type="text"/>	Number of days earlier than	* <input type="text"/> <input type="text"/> <input type="text"/>	} 1 = Nugget 2 = Fylking 3 = Delta 4 = Merion 5 = Newport 6 = Baron 10. Unique 7 = Mystic 8 = Sabre 9 = Reubens
<input type="text"/> <input type="text"/> <input type="text"/>	Maturity same as	* <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="text"/> <input type="text"/> <input type="text"/>	Number of days later than	* <input type="text"/> <input type="text"/> <input type="text"/>	

4. PLANT HEIGHT (At maturity-Average of longest shoot of 10 plants from soil surface to top of panicle): Test area _____

* <input type="text"/> <input type="text"/> <input type="text"/>	1 = Short (Nugget)	2 = Medium short (Baron, Fylking, Mystic)	
	3 = Medium tall (Merion, Adelphi)	4 = Tall (Delta)	5 = Very tall
* <input type="text"/> <input type="text"/> <input type="text"/>	cm Height		
<input type="text"/> <input type="text"/> <input type="text"/>	cm Shorter than	* <input type="text"/> <input type="text"/> <input type="text"/>	} 1 = Nugget 2 = Fylking 3 = Delta 4 = Merion 5 = Newport 6 = Baron 7 = Mystic 8 = Sabre 9 = Reubens 10. Unique
<input type="text"/> <input type="text"/> <input type="text"/>	Height same as	* <input type="text"/> <input type="text"/> <input type="text"/>	
<input type="text"/> <input type="text"/> <input type="text"/>	cm Taller than	* <input type="text"/> <input type="text"/> <input type="text"/>	

5. GROWTH HABIT:

* <input type="text"/> <input type="text"/> <input type="text"/>	Habit: 1 = Prostrate (Nugget)	2 = Semi-prostrate (Merion)	3 = Erect (Delta)
<input type="text"/> <input type="text"/> <input type="text"/>	cm Amount of spread by rhizomes in 1 year (give test area _____)		

6. LEAF BLADE:

- ★ ☐ 4 Green Color: 1 = Light green (Mystic) 2 = Medium green (Fylking, Bonnieblue)
 3 = Moderately dk. green (Merion, Adelphi) 4 = Very dk. green (Nugget, Glade, Enmundi)
- ★ ☐ 3 Bluegreen color: 1 = Not bluegreen (Mystic, Touchdown, Parade) 2 = Moderately bluegreen (Merion, A-34)
 3 = Bluegreen (Nugget, Enmundi, Adelphi) 4 = Strongly bluegreen (Majestic)
- ☐ 2 Winter color: 1 = Light green 2 = Dark green 3 = Light purple
 4 = Dark purple 5 = Not purple 6 = Not green or purple
- ★ ☐ 1 Hairs upper side: 1 = Absent (Nugget) 2 = Sparse (Merion) 3 = Dense (Park)
☐ Hairs lower side: 1 = Absent (Fylking, Merion) 2 = Sparse 3 = Dense (Nugget)
- ☐ Luster upper side: 1 = Shiny (Eclipse, Enmundi) 2 = Dull (Aquila, Parade)
☐ Luster lower side: 1 = Shiny (Mystic, Enmundi) 2 = Dull (Barbie, Eclipse)
- ★ ☐ 2 Margin hairs (Fringe on Margin or Base): 1 = Absent (Delta) 2 = Present (Fylking, Merion)
- ★ ☐ 2 Width: 1 = Very fine (Mystic) 2 = Fine (Nugget) 3 = Medium (Merion, Fylking)
 4 = Broad (Adelphi, Baron) 5 = Very broad (Monopoly)

- ☐ 3 ☐ 3 mm Width (flag leaf)
- ☐ ☐ mm Narrower than ★ ☐ 1 = Nugget 2 = Fylking 3 = Delta
 Width same as ★ ☐ 4 = Merion 5 = Newport 6 = Baron
☐ 8 mm Wider than ★ ☐ 10 7 = Mystic 8 = Sabre 9 = Reubens

- ☐ 4 ☐ 9 mm Length (flag leaf) 10. Unique
- ☐ ☐ mm Shorter than ★ ☐ 1 = Nugget 2 = Fylking 3 = Delta
 Length same as ★ ☐ 4 = Merion 5 = Newport 6 = Baron
☐ 3 mm Longer than ★ ☐ 10 7 = Mystic 8 = Sabre 9 = Reubens
☐ 2 Position of flag leaf (angle to stem): 1 = Appressed 2 = Open angle, yet stiff 3 = Nodding

7. LEAF SHEATH:

- ☐ 8 ☐ 7 mm sheath length Tiller leaf
- ★ ☐ 1 Seedling Color (base of sheath): 1 = Green (Nugget, Merion) 2 = Red (Delta)
- ★ ☐ 2 Hairs on Margin: 1 = Absent (Fylking) 2 = Present (Nugget)
- ★ ☐ 1 Margin Roughness (to touch): 1 = Smooth (Delta) 2 = Rough (Sabre)
- ☐ 2 Hairs on Surface: 1 = Absent () 2 = Present (Nugget)
- ☐ 1 Surface Roughness (to touch): 1 = Smooth (Fylking) 2 = Rough (Ram I)
- ☐ 2 Hairs on both sides just beneath leaf blade (under collar): 1 = Absent (Merion) 2 = Present (Nugget)
- ★ ☐ 2 Hairs on Ligule: 1 = Absent (Fylking) 2 = Short (Baron) 3 = Long (Nugget)
- ☐ 1 Glaucosity: 1 = Absent (Mystic, Enmundi) 2 = Present (Birka)
- ☐ 2 Keel: 1 = Absent (Ram I) 2 = Present (Adelphi)

8. PANICLE (Mature Plant):

<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="5"/>	mm Length (Lowest branch whorl to top, for 10 plants) Test area: _____
<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="5"/>	mm Shorter than <input type="text" value="10"/> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">1 = Nugget</div> <div style="display: inline-block; vertical-align: middle;">2 = Fylking</div> <div style="display: inline-block; vertical-align: middle;">3 = Delta</div> </div>
<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="5"/>	Panicle same as <input type="text" value="10"/> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">4 = Merion</div> <div style="display: inline-block; vertical-align: middle;">5 = Newport</div> <div style="display: inline-block; vertical-align: middle;">6 = Baron</div> </div>
<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="5"/>	mm Longer than <input type="text" value="10"/> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">7 = Mystic</div> <div style="display: inline-block; vertical-align: middle;">8 = Sabre</div> <div style="display: inline-block; vertical-align: middle;">9 = Reubens</div> <div style="display: inline-block; vertical-align: middle;">10. Unique</div> </div>
★	<input type="text" value="1"/>	<input type="text" value="1"/>	Color (at 50% flowering): 1 = Not red (Fylking) 2 = Red (Nugget)
★	<input type="text" value="1"/>	<input type="text" value="1"/>	Shape of Rachis (opposite lower side branches): 1 = No bend (Nugget) 2 = Bend (Merion)
★	<input type="text" value="1"/>	<input type="text" value="1"/>	Collar: 1 = Opened (Nugget) 2 = Closed (Merion)
★	<input type="text" value="1"/>	<input type="text" value="1"/>	Branches Attitude (Lowest whorl): 1 = Drooping (America, Prato) 2 = Horizontal (Merion)
	<input type="text" value="4"/>	<input type="text" value="1"/>	Number of main branches in lowest whorl 3 = Ascending (Tundra)
★	<input type="text" value="2"/>	<input type="text" value="2"/>	Panicle Habit: 1 = Nodding (Newport) 2 = Upright (Nugget)
★	<input type="text" value="2"/>	<input type="text" value="2"/>	Panicle Type: 1 = Open 2 = Intermediate 3 = Compact
	<input type="text" value="2"/>	<input type="text" value="2"/>	Anther color (anthesis): 1 = Purple 2 = Yellow 3 = Brown

9. LEMMA

★	<input type="text" value="2"/>	Keel	} 1 = Glabrous 2 = Slightly pubescent 3 = Pubescent
★	<input type="text" value="2"/>	Marginal Nerves	
	<input type="text" value="2"/>	Intermediate Nerves:	1 = Distinct 2 = Obscure
	<input type="text" value="2"/>	Basal Webbing:	1 = Absent 2 = Scant (Baron) 3 = Copious (Merion)

10. SEED: (Floret-not dehulled)

★	<input type="text" value="1"/>	Apomixis Percentage:	1 = more than 95	2 = 85 to 95	3 = less than 85
	<input type="text" value="1"/>	Phenol Reaction:	1 = none-lemma removed (Merion)	2 = Beige (Cougar)	3 = Brown (Windsor)
			4 = Black (Mystic-2 hrs)	5 = Black (-24 hours)	
	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="2"/>	<input type="text" value="7"/>	
		mm. Width (average of 10)	<input type="text" value="1"/>	<input type="text" value="1"/>	mm Length
	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="2"/>	<input type="text" value="7"/>	
		Milligrams per 10,000 seed	<input type="text" value="1"/>	<input type="text" value="1"/>	
		Milligrams less than	★	<input type="text" value="10"/>	
		Weight same as	★	<input type="text" value="10"/>	
		Milligrams more than	★	<input type="text" value="10"/>	
★	<input type="text" value="2"/>	Weight Class (g per 10,000 seed):	1 = Light (< 3g Sydsport, Merion)		
			2 = Medium (3g - 4g Adelphi, Parade)		
			3 = Heavy (> 4g Fylking, Nugget)		

11. ENVIRONMENTAL RESISTANCE: (0 = Not tested; 1 = Very susceptible; 2 = Moderately susceptible; 3 = Moderately resistant; 4 = Highly resistant)

<input type="text" value="3"/>	Cool Temperature (Winter color)	<input type="text" value="3"/>	Cold (injury)	<input type="text" value="3"/>	Heat	<input type="text" value="3"/>	Drought
<input type="text" value="3"/>	Shade	<input type="text" value="3"/>	Low Fertility	<input type="text" value="0"/>	Acid Soil (< pH 5.5)	<input type="text" value="0"/>	Alkalinity (pH > 7.5)
<input type="text" value="1"/>	Salinity	<input type="text" value="2"/>	Soil Compaction	<input type="text" value="0"/>	Poor Drainage	<input type="text" value="0"/>	Air Pollution
<input type="text" value="1"/>	Other (Specify) _____						

12. DISEASE RESISTANCE: (0 = Not tested, 1 = Very susceptible, 2 = Moderately susceptible, 3 = Moderately resistant, 4 = Highly Resistant)

★	<input type="text" value="3"/>	Melting-Out <u>Drechslera poae</u> (Helminthosporium vagans)	<input type="text" value="0"/>	Sclerotinia Patch <u>S. borealis</u>
★	<input type="text" value="2"/>	Helminthosporium Leaf Spot <u>Bipolaris sorokiniana</u>	<input type="text" value="2"/>	Stem Rust <u>Puccinia graminis</u>
	<input type="text" value="2"/>	Brown Patch <u>Rhizoctonia solani</u>	<input type="text" value="0"/>	Stripe Rust <u>P. striiformis</u>
	<input type="text" value="4"/>	Powdery Mildew <u>Erysiphe graminis</u>	★	<input type="text" value="2"/>
★	<input type="text" value="4"/>	Stripe Smut <u>Ustilago striiformis</u>	<input type="text" value="0"/>	Leaf Rust <u>P. poae-nemoralis</u>
			<input type="text" value="0"/>	Orange Stripe Rust <u>P. poarum</u>

12. DISEASE RESISTANCE (Continued)

<input type="text" value="0"/>	Flag Smut <u>Urocystis agropyri</u>	<input type="text" value="3"/>	Pythium Blight <u>Pythium</u> spp.
<input type="text" value="3"/>	Pink Snow Mold <u>Fusarium nivale</u>	<input type="text" value="3"/>	Red Thread <u>Corticium fuciforme</u>
<input type="text" value="3"/>	Ergot <u>Claviceps purpurea</u>	<input type="text"/>	Other _____
* <input type="text" value="3"/>	Fusarium Blight <u>Fusarium roseum</u> , <u>F. tricinctum</u>	<input type="text"/>	Other _____
<input type="text" value="3"/>	Typhula Blight <u>Typhula</u> spp.		
<input type="text" value="0"/>	Dollar Spot <u>Sclerotinia homoeocarpa</u>		

13. INSECTS, NEMATODES, RESISTANCE: (0 = Not tested; 1 = Very susceptible; 2 = Moderately susceptible; 3 = Moderately resistant; 4 = Highly resistant)

<input type="text" value="2"/>	Chinch Bug <u>Blissus</u> spp. (give species: _____)
<input type="text" value="3"/>	Sod Webworm <u>Crambus</u> spp. (give species: _____)
<input type="text" value="2"/>	Bluegrass Billbug <u>Sphenophorus parvulus</u> _____)
<input type="text" value="2"/>	White Grub (Japanese Beetle, Chafer. (give species: _____)
<input type="text" value="0"/>	Greenbug Aphid <u>Schizaphis graminum</u>
<input type="text"/>	Other _____
<input type="text"/>	Other _____

14. Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading	Unique	2	Leaf width	Wabash	2
Height	"	3	Leaf color spring	Unique	2
Seed size	Unique	2	Leaf color summer	Unique	2
Seed weight	Unique	2	Leaf color winter	NuGlade	2
Cold injury	Unique	2	Drought	Unique	2
Heat	Wabash	2	Disease ★ ★		
Shade	Unique	2			

★★ Specify each disease evaluated.

15. ADDITIONAL DESCRIPTION:

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.

2001 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR. (includes 2000 commercial national test entries)

Entry	Plant Height (cm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)
Unique	69.4	32.4	9.9
America	72.9	39.2	11.7
LTP-1323	76.5	44.4	12.2
LTP-329	75.1	44.4	16.1
LTP-1135	73.0	43.4	12.1
LSD (0.05)	3.3	3.1	0.8

2002 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR.

Entry	Plant Height (cm)	Flag Leaf		Tiller Leaf		Panicle Length (cm)	Length from Flag Leaf to Inflorescence (cm)		Branches in Lowest Whorl (#)	Tiller Leaf		Flag Leaf		Tiller Leaf		Flag Leaf		Tiller Count (#/12.7 cm Row)
		Height (cm)	Length (cm)	Sheath Length (cm)	Length (cm)					Length (cm)	Width (mm)	Length (cm)	Width (mm)	Length (cm)	Width (mm)	Length (cm)	Width (mm)	
Wabash	89.7	44.4	16.3	10.7	13.7	37.9	4.4	12.9	4.5	9.3	3.7	9.3	3.7	9.3	3.7	9.3	3.7	~
Cabernet (LTP-329)	68.9 [^]	35.7 [^]	12.0 [^]	8.5 [^]	10.9 [^]	28.7 [^]	3.9 [^]	6.8 [^]	3.5 [^]	4.4 [^]	3.1 [^]	4.4 [^]	3.1 [^]	4.4 [^]	3.1 [^]	4.4 [^]	3.1 [^]	53.3
LSD (0.05)	2.4	2.0	1.1	0.6	0.8	1.6	0.3	0.6	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.3	17.6

[^] = Significant compared to Wabash

2002 mean morphological measurements for entries in a single row Kentucky bluegrass seed yield trial seeded fall of 2001 near Hubbard, OR.

Entry	Plant Height (cm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Tiller Leaf Sheath Length (cm)	Panicle Length (cm)	Length from Flag Leaf to Top of Inflorescence (cm)	Branches in Lowest Whorl (#)	Tiller Leaf Length (cm)	Tiller Leaf Width (mm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Tiller Count (#/12.7 cm Row)
Julia	81.7	46.4	11.9	7.7	10.0	34.5	3.7	8.1	3.1	6.5	2.7	67.9
Cabernet (LTP-329)	71.1	35.2	13.5	10.4	11.9	35.2	3.7	12.8	3.3	6.7	2.8	15.5
Baron	67.3	35.2	10.7	7.9	8.1	32.8	3.7	6.4	3.1	4.1	2.7	42.2
LSD (0.05)	2.3	2.1	0.7	0.6	0.5	1.8	0.3	0.7	0.3	0.5	0.3	8.5

200200155

2003 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2002 near Hubbard, OR.

Entry	Plant Height (cm)	Top Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Tiller Leaf Sheath Length (cm)	Panicle Length (cm)	Flag Leaf to Panicle Top (cm)	Branches/ Lowest Whorl (#)	Tiller Leaf Length (cm)	Tiller Leaf Width (mm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Tiller Count (#/100 cm ²)
Wabash	78.2	39.6	16.4	13.9	13.7	39.9	4.6	15.9	3.7	10.1	3.5	38.8
Cabernet	64.5	28.5	12.0	8.7	10.5	33.6	4.4	9.0	3.5	4.9	3.3	47.9
Unique	50.0	19.9	8.9	3.8	8.7	27.0	4.1	7.8	2.8	4.6	2.5	54.8
LSD (0.05)	2.4	2.3	0.7	0.7	0.5	1.7	0.3	0.7	0.3	0.5	0.3	11.2

2001 mean initial heading dates for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR.

Entry	Mean
Unique	05 May
LTP-329	04 May
LTP-1323	03 May
Wabash	01 May
LTP-1135	28 April
America	23 April

LSD (0.05)	7 days
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2002 mean initial heading dates for entries in a single row Kentucky bluegrass seed yield trial seeded fall of 2001 near Hubbard, OR.

Entry	2002
Cabernet (LTP-329)	3 May
Julia	26 April
Baron	19 April
LSD (0.05)	7 days

200200155

Mean initial heading dates for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR.

Entry	2001	2002
Cabernet (LTP-329)	04 May	28 April
Wabash	01 May	28 April
LSD (0.05)	7 days	4 days

200200155

2003 mean initial heading dates for entries in a Kentucky bluegrass seed yield trial seeded fall of 2002 near Hubbard, OR.

Entry	2003
Cabernet	05 May
Unique	05 May
Wabash	19 April
LSD (0.05)	6 days

DOCUMENTATION IN SUPPORT OF CERTIFICATE

The following documents were submitted in support of this Certificate and are on file in the United States Plant Variety Protection Office:

1999 Rutgers Turfgrass Proceedings

2000 Rutgers Turfgrass Proceedings

2001 National Turfgrass Evaluation Program Report

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICEEXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Lebanon Seaboard Corporation		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER H94-329 & LTP-329	3. VARIETY NAME Cabernet
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) P.O. Box 10 Huntsville, UT 84317-0010		5. TELEPHONE (include area code) 503-580-7333	6. FAX (include area code) 801-745-4610
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.		7. PVPO NUMBER 2002 00155	
		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country			
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
10. Is the applicant the original owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, please answer the following:			
a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?			
<input type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country			
b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?			
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country			
11. Additional explanation on ownership (If needed, use reverse for extra space):			
Cabernet was developed jointly by Lebanon Seaboard Corporation and Rutgers University. Lebanon Seaboard was given exclusive ownership contractually.			

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.